

ABSTRACT OF THE DISCLOSURE

- 5 An arrangement (10) for efficiently shifting energy received at a first wavelength and outputting the shifted energy at a second wavelength. The arrangement (10) includes a laser (12) and an optical parametric oscillator (14) of unique design. The oscillator (14) is constructed with an energy shifting crystal (20) and first and second reflective elements (16) and (18) disposed on either side thereof.
- 10 Light from the laser (12) at a fundamental frequency is shifted by the crystal and output at a second wavelength. The second wavelength is a secondary emission of energy induced by a primary emission generated by the first wavelength in the crystal. A novel feature of the invention is a coating applied on the reflective elements (16 and/or 18) for containing the primary emission and enhancing the secondary emission.
- 15 This constrains the energy to be output by the arrangement (10) at the wavelength of the desired secondary emission.